UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,141	10/24/2001	Nikolai K.N. Leung	010438B1	1798

23696   7590   02/25/2010

QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER
MATTIS, JASON E

ART UNIT	PAPER NUMBER
2461	

NOTIFICATION DATE	DELIVERY MODE
02/25/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kascanla@qualcomm.com
nanm@qualcomm.com

	Application No.	Applicant(s)
Office Action Summary	10/033,141	LEUNG, NIKOLAI K.N.
	Examiner	Art Unit
	JASON E. MATTIS	2461

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _09 December 2009_.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-51_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-51_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
            application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to the Request for Reconsideration filed

12/9/09. Claims 1-51 are currently pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-7, 9-16, 18-20, 22-27, 29-36, 39-44, and 46-50 are rejected under 35

U.S.C. 103(a) as being unpatentable over Gagnon et al. (European Patent Application

EP 1 024 661 A2) in view of Wugofski (U.S. Patent 6,990,680 B1).

With respect to claim 1, Gagnon et al. discloses a wireless communication

system supporting a broadcast service **(See page 7 paragraphs 29-30 and Figure 1 of**

Gagnon et al. for reference to a satellite communication system supporting

broadcasting). Gagnon et al. also discloses transmitting a broadcast session on a

broadcast transmission channel **(See page 7 paragraph 31 and Figure 1 of Gagnon**

et al. for reference to broadcasting a broadcast session from a transmission

station 102 to a receiver station 106 via a satellite/relay 104). Gagnon et al. further

discloses transmitting broadcast overhead information for the broadcast session with

the broadcast session **(See page 8 paragraph 36 of Gagnon et al. for reference to**

including session description protocol plus (SDP+) records, which provide

information about the broadcast sessions, in the broadcast sessions). Gagnon et

al. also discloses that the broadcast overhead information provides information to a

receiver for processing the broadcast session **(See page 16 paragraph 84 of Gagnon**

et al. for reference to SDP+ records containing a combination of SDP fields and

augmentations including a protocol version field, the owner/creator and session

identifier, the name of the session, a brief description of the session, the

multicast address on which the session is being broadcast, the start and end

times of the broadcast, the repeat times of the broadcast, the port of the

broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast),

sorting information and filtering information, which are all types of information

used to process the broadcast session by the receiver station 106). Gagnon et al.

further discloses the broadcast overhead information including physical channel

parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon**

et al. for reference to the SDP+ records including information regarding start and

end times of a broadcast, duration of a broadcast, and port of a broadcast, which

are all physical channel parameters of the broadcast session used by a receiver

to properly tune itself to receive the broadcast session). Gagnon et al. does not

specifically disclose the broadcast overhead information being transmitted in-band with

the broadcast session.

With respect to claim 3, Gagnon et al. discloses a communication signal

transmitted on a carrier wave **(See page 7 paragraph 31 and Figure 1 of Gagnon et**

al. for reference to a communication signal transmitted on a carrier wave from a

transmission station 102 to a satellite/relay 104 and for reference to the signal

being further transmitted form the satellite/relay 104 to a receiver station 106 on

another carrier wave). Gagnon et al. also discloses transmitting a broadcast session

portion **(See page 7 paragraph 31 of Gagnon et al. for reference to the signal**

including a broadcast session). Gagnon et al. further discloses transmitting a

session description protocol message interleaved with the broadcast session portion,

wherein the SDP provides information to a receiver for processing the broadcast

session **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for**

reference to a broadcast signal including SDP+ records and for reference to SDP+

records containing a combination of SDP fields and augmentations including a

protocol version field, the owner/creator and session identifier, the name of the

session, a brief description of the session, the multicast address on which the

session is being broadcast, the start and end times of the broadcast, the repeat

times of the broadcast, the port of the broadcast, the type of broadcast (e.g.,

BFDP, Stream, Webcast, or Intercast), sorting information and filtering

information, which are all types of information used to process the broadcast

session by the receiver station 106). Gagnon et al. also discloses the SDP including

physical channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph**

90 of Gagnon et al. for reference to the SDP+ records including information

regarding start and end times of a broadcast, duration of a broadcast, and port of a broadcast, which are all physical channel parameters of the broadcast session used by a receiver to properly tune itself to receive the broadcast session). Gagnon et al. does not specifically disclose the SDP information being transmitted in-band with the broadcast session.

With respect to claim 5, Gagnon et al. discloses a wireless communication system supporting a broadcast service **(See page 7 paragraphs 29-30 and Figure 1 of Gagnon et al. for reference to a satellite communication system supporting broadcasting).** Gagnon et al. also discloses receiving a session description protocol message corresponding to the broadcast session on the broadcast channel **(See page 8 paragraph 36 of Gagnon et al. for reference to receiving SDP+ records about a broadcast session on the broadcast channel).** Gagnon et al. further discloses that the SDP message provides information to a receiver for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106).** Gagnon et al. also discloses the SDP message including physical

channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of**

Gagnon et al. for reference to the SDP+ records including information regarding

start and end times of a broadcast, duration of a broadcast, and port of a

broadcast, which are all physical channel parameters of the broadcast session

used by a receiver to properly tune itself to receive the broadcast session).

Gagnon et al. further discloses accessing a broadcast session and processing the

broadcast session using the SDP message **(See page 8 paragraph 36 and page 16**

paragraph 84 of Gagnon et al. for reference to accessing a broadcast session

indicated by the SDP+ records and processing the broadcast session using

information in the SDP+ records). Gagnon et al. does not specifically disclose the

SDP information being transmitted in-band with the broadcast session.

      With respect to claim 7, Gagnon et al. discloses a wireless apparatus **(See**

page 7 paragraph 30 and Figure 1 of Gagnon et al. for reference to receiver

station 106, which is a wireless apparatus). Gagnon et al. also discloses a means

for receiving a broadcast service parameter message corresponding to a broadcast

session in a broadcast stream and a means for receiving an SDP corresponding to the

broadcast session **(See page 8 paragraph 36 of Gagnon et al. for reference to**

receiver station 106 receiving SDP+ records, which are broadcast service

parameter messages about a broadcast session on the broadcast channel).

Gagnon et al. further discloses that the SDP message provides information to a receiver

for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for**

reference to SDP+ records containing a combination of SDP fields and

augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106). Gagnon et al. also discloses the SDP message including physical channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information regarding start and end times of a broadcast, duration of a broadcast, and port of a broadcast, which are all physical channel parameters of the broadcast session used by a receiver to properly tune itself to receive the broadcast session).** Gagnon et al. further discloses a means for processing the broadcast session using the SDP **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to processing the broadcast session using information in the SDP+ records).** Gagnon et al. does not specifically disclose the SDP information being transmitted in-band with the broadcast session.

With respect to claim 12, Gagnon et al. discloses a method for indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).** Gagnon et al. also discloses multiplexing information identifying a broadcast session protocol with a content of the broadcast session to provide a broadcast stream **(See**

page 8 paragraph 36 for reference to multiplexing SDP+ records with a broadcast session to provide a broadcast stream). Gagnon et al. further discloses transmitting the broadcast stream on a broadcast transmission channel **(See page 7 paragraph 31 of Gagnon et al. for reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104)**. Gagnon et al. also discloses that the information identifying the broadcast session protocol provides information to a receiver for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106)**. Gagnon et al. further discloses the information including physical channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information regarding start and end times of a broadcast, duration of a broadcast, and port of a broadcast, which are all physical channel parameters of the broadcast session used by a receiver to properly tune itself to receive the broadcast session)**. Gagnon et al. does not

specifically disclose the information identifying the broadcast session being transmitted

in-band with the broadcast session.

With respect to claim 19, Gagnon et al. discloses a method indicating

broadcast session protocol (See page 16 paragraph 84 of Gagnon et al. for

reference to using SDP+ records to indicate a broadcast session protocol).

Gagnon et al. also discloses receiving a broadcast stream (See page 7 paragraph 31

and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a

broadcast stream). Gagnon et al. further discloses determining information in the

broadcast stream identifying a broadcast session protocol in accordance with the

received broadcast stream (See page 8 paragraph 36 and page 16 paragraph 84 of

Gagnon et al. for reference to determining SDP+ records, which are records that

identify a broadcast session protocol and that are sent with the broadcast stream

and for reference to SDP+ records containing a combination of SDP fields and

augmentations including a protocol version field, the owner/creator and session

identifier, the name of the session, a brief description of the session, the

multicast address on which the session is being broadcast, the start and end

times of the broadcast, the repeat times of the broadcast, the port of the

broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast),

sorting information and filtering information, which are all types of information

used to process the broadcast session by the receiver station 106). Gagnon et al.

also discloses the information including physical channel parameters (See page 16

paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the

SDP+ records including information regarding start and end times of a broadcast,

duration of a broadcast, and port of a broadcast, which are all physical channel

parameters of the broadcast session used by a receiver to properly tune itself to

receive the broadcast session). Gagnon et al. further discloses processing the

broadcast stream in accordance with the determined information if the receiving station

contains the broadcast session protocol **(See page 8 paragraph 36 and page 16**

paragraph 84 of Gagnon et al. for reference to processing the broadcast session

using information in the SDP+ records at the receiving station). Gagnon et al.

does not specifically disclose the information in the broadcast stream being transmitted

in-band with the broadcast session.

       With respect to claim 23, Gagnon et al. discloses a method indicating

broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for**

reference to using SDP+ records to indicate a broadcast session protocol).

Gagnon et al. also discloses multiplexing information identifying a broadcast session

protocol with a content of the broadcast session to provide a broadcast stream **(See**

page 8 paragraph 36 for reference to multiplexing SDP+ records with a broadcast

session to provide a broadcast stream). Gagnon et al. further discloses providing

the broadcast stream for transmission **(See page 7 paragraph 31 of Gagnon et al. for**

reference to broadcasting a broadcast session from a transmission station 102 to

a receiver station 106 via a satellite/relay 104). Gagnon et al. also discloses that the

information identifying the broadcast session protocol provides information to a receiver

for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for**

reference to SDP+ records containing a combination of SDP fields and

augmentations including a protocol version field, the owner/creator and session

identifier, the name of the session, a brief description of the session, the

multicast address on which the session is being broadcast, the start and end

times of the broadcast, the repeat times of the broadcast, the port of the

broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast),

sorting information and filtering information, which are all types of information

used to process the broadcast session by the receiver station 106). Gagnon et al.

further discloses the information including physical channel parameters **(See page 16**

paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the

SDP+ records including information regarding start and end times of a broadcast,

duration of a broadcast, and port of a broadcast, which are all physical channel

parameters of the broadcast session used by a receiver to properly tune itself to

receive the broadcast session). Gagnon et al. does not specifically disclose the

information identifying the broadcast session protocol being transmitted in-band with the

broadcast session.

      With respect to claim 34, Gagnon et al. discloses a method indicating

broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for**

reference to using SDP+ records to indicate a broadcast session protocol).

Gagnon et al. also discloses receiving a broadcast stream **(See page 7 paragraph 31**

and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a

broadcast stream). Gagnon et al. further discloses determining an information

element in the broadcast stream **(See page 8 paragraph 36 of Gagnon et al. for reference to determining SDP+ records, which are information elements that identify a broadcast session protocol and that are sent with the broadcast stream)**. Gagnon et al. also discloses processing the broadcast stream in accordance with the determined information element **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. stream for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106)**. Gagnon et al. further discloses the information including physical channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information regarding start and end times of a broadcast, duration of a broadcast, and port of a broadcast, which are all physical channel parameters of the broadcast session used by a receiver to properly tune itself to receive the broadcast session)**. Gagnon et al. does not specifically disclose the information element being transmitted in-band with the broadcast session.

With respect to claim 39, Gagnon et al. discloses a method for indicating

broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for**

reference to using SDP+ records to indicate a broadcast session protocol).

Gagnon et al. also discloses multiplexing an information for a receiver for processing

broadcast session with a content of the broadcast session to provide a broadcast

stream **(See page 8 paragraph 36 for reference to multiplexing SDP+ records with**

a broadcast session to provide a broadcast stream and for reference to SDP+

records containing a combination of SDP fields and augmentations including a

protocol version field, the owner/creator and session identifier, the name of the

session, a brief description of the session, the multicast address on which the

session is being broadcast, the start and end times of the broadcast, the repeat

times of the broadcast, the port of the broadcast, the type of broadcast (e.g.,

BFDP, Stream, Webcast, or Intercast), sorting information and filtering

information, which are all types of information used to process the broadcast

session by the receiver station 106). Gagnon et al. further discloses the information

including physical channel parameters **(See page 16 paragraphs 84-87 and page 17**

paragraph 90 of Gagnon et al. for reference to the SDP+ records including

information regarding start and end times of a broadcast, duration of a broadcast,

and port of a broadcast, which are all physical channel parameters of the

broadcast session used by a receiver to properly tune itself to receive the

broadcast session). Gagnon et al. also discloses transmitting the broadcast stream on

a broadcast transmission channel **(See page 7 paragraph 31 of Gagnon et al. for**

reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104). Gagnon et al. does not specifically disclose the information being transmitted in-band with the broadcast session.

With respect to claim 47, Gagnon et al. discloses a method indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol)**. Gagnon et al. also discloses receiving a broadcast stream **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a broadcast stream)**. Gagnon et al. further discloses determining information to a receiver in the broadcast stream for processing a broadcast session in accordance with the received broadcast stream **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to determining SDP+ records, which are records that identify a broadcast session protocol for broadcast session processing and that are sent with the broadcast stream and for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intercast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106)**. Gagnon et al. also discloses the broadcast overhead information

including physical channel parameters **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information regarding start and end times of a broadcast, duration of a broadcast, and port of a broadcast, which are all physical channel parameters of the broadcast session used by a receiver to properly tune itself to receive the broadcast session)**. Gagnon et al. further discloses processing the broadcast stream in accordance with the determined information **(See page 8 paragraph 36, page 16 paragraph 84, and page 17 paragraph 90 of Gagnon et al. for reference to processing the broadcast session using information in the SDP+ records at the receiving station)**. Gagnon et al. does not specifically disclose the information being transmitted in-band with the broadcast session.

   With respect to claims 1, 3, 5, 7, 12, 19, 23, 34, 39, and 47, Wugofski, in the field of communications discloses transmitting broadcast overhead information in-band with a broadcast stream **(See column 2 lines 11-31, column 3 line 39 to column 4 line 3, and Figure 1A of Wugofski for reference to a program guide information, which is broadcast overhead information, being provided in-band in the vertical blanking interval of a channel with the in-band information including information used to process a broadcast session)**. Transmitting broadcast overhead information in-band with a broadcast stream has the advantage of creating more efficient bandwidth usage since no bandwidth channels need to be assigned to exclusively include broadcast control information.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Wugofski, to combine transmitting broadcast

overhead information in-band with a broadcast stream, as disclosed by Wugofski, with

the system and method of Gagnon et al., with the motivation being to create more

efficient bandwidth usage since no bandwidth channels need to be assigned to

exclusively include broadcast control information.

With respect to claim 2, Gagnon et al. discloses that the broadcast overhead

information is a SDP message containing information for processing the session **(See**

page 8 paragraph 36 for reference to the overhead being an SDP+ record).

Gagnon et al. also discloses that the SDP message is interleaved with broadcast

content **(See page 8 paragraph 36 for reference to the SDP+ records being**

broadcast on the broadcast channel with the broadcast data meaning they are

interleaved with the broadcast content).

With respect to claim 4, Gagnon et al. discloses that the signal is transmitted

via a broadcast transmission channel **(See page 7 paragraphs 29-30 and Figure 1 of**

Gagnon et al. for reference to transmitting signals on a broadcast transmission

channel).

With respect to claim 6, Gagnon et al. discloses that the SDP message is

interleaved with the broadcast content of the broadcast session **(See page 8 paragraph**

36 for reference to the SDP+ records being broadcast on the broadcast channel

with the broadcast data meaning they are interleaved with the broadcast content).

With respect to claim 9, Gagnon et al. discloses a memory storage storing the SDP corresponding to a plurality of broadcast session that is updated when the corresponding broadcast session is access **(See page 12 paragraph 61 of Gagnon et al. for reference to SDP+ data store 540 that is a database storing SDP+ record information for multiple broadcast sessions that is updated when a broadcast session is accessed)**.

With respect to claim 10, Gagnon et al. discloses that the memory is a cache memory **(See page 12 paragraph 61 of Gagnon et al. for reference to the SDP+ data store 540 being updated dynamically meaning SDP+ records are cached in the database)**.

With respect to claim 11, Gagnon et al. discloses that the memory is a look up table **(See page 12 paragraph 61, page 17 paragraph 89, and Figures 16A-16D of Gagnon et al. for reference to the memory being indexed by fields including an IP address of the corresponding broadcast session)**.

With respect to claims 13, 24, and 41, Gagnon et al. discloses multiplexing the broadcast session protocol with the broadcast session at the content server **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to multiplexing broadcast data and control data at the transmitter station 102, which is the content server)**.

With respect to claims 14, 25, and 42, Gagnon et al. discloses multiplexing the broadcast session protocol with the content of the broadcast session periodically **(See page 8 paragraph 36 for reference to multiplexing SDP+ records periodically)**.

With respect to claims 15, 26, and 43, Gagnon et al. discloses periodically

multiplexing with a frequency of multiplexing a short-term encryption key **(See page 12**

paragraph 64 of Gagnon et al. for reference to multiplexing SDP+ records

periodically at the same time as an encryption key).

With respect to claims 16, 27, and 44, Gagnon et al. discloses multiplexing to

provide a broadcast stream in accordance with a bandwidth condition **(See page 7**

paragraph 31 of Gagnon et al. for reference to multiplexing the data together,

which must conform to a maximum allowed bandwidth allocated to each

broadcast channel).

With respect to claims 18, 29, and 46, Gagnon et al. discloses multiplexing a

broadcast session description identifier with a content of the broadcast session **(See**

page 15 paragraph 79 of Gagnon et al. for reference to multiplexing BARP

information with the broadcast data with the BARP information indicating an IP

address of a broadcast channel, which is an identifier of the broadcast session).

With respect to claim 20, Gagnon et al. discloses retrieving the broadcast

session protocol from a storage media at the receiving station and processing the

stream in accordance with the retrieved protocol **(See page 12 paragraph 61 of**

Gagnon et al. for reference to SDP+ data store 540 that is a database storing

SDP+ record information for multiple broadcast sessions and for reference to

using data retrieved from the data store to process broadcast sessions).

With respect to claim 22, Gagnon et al. discloses determining a broadcast

session description identifier of a broadcast session **(See page 15 paragraph 79 of**

Gagnon et al. for reference to determining BARP information from broadcast

sessions, with the BARP information indicating an IP address of a broadcast

channel, which is an identifier of the broadcast session).

　　　　With respect to claim 30, Gagnon et al. discloses forming an information

element comprising the broadcast session description identifier **(See page 15**

paragraph 79 of Gagnon et al. for reference to using BARP information from

broadcast sessions, with the BARP information indicating an IP address of a

broadcast channel, which is an identifier of the broadcast session). Gagnon et al.

also discloses multiplexing the information element with a content of the broadcast

session **(See page 15 paragraph 79 of Gagnon et al. for reference to multiplexing**

BARP information with the broadcast data).

　　　　With respect to claim 31, Gagnon et al. discloses assigning each unit of the

broadcast stream a sequence number **(See page 12 paragraph 64 of Gagnon et al.**

for reference to each packet including a continuity counter that is contains a

sequence number).

　　　　With respect to claim 32, Gagnon et al. discloses delivering each of the units

through a media not guaranteeing in-sequence deliver and re-ordering the delivered

units in accordance with sequence number **(See page 12 paragraph 64 of Gagnon et**

al. for reference to using a continuity counter in each packet to re-order packets

in the correct order at the receiver when packets are received out of sequence).

　　　　With respect to claim 33, Gagnon et al. discloses establishing a generic routing

encapsulation tunnel through a media not guaranteeing in-sequence delivery **(See page**

12 paragraph 64 of Gagnon et al. for reference to using a continuity counter in

each packet to re-order packets in the correct order at the receiver when packets

are received out of sequence through the air/satellite transmission medium).

With respect to claim 35, Gagnon et al. discloses determining a broadcast

session protocol and processing the broadcast session in accordance with the

broadcast session protocol **(See page 8 paragraph 36 and page 16 paragraph 84 of**

Gagnon et al. for reference to a broadcast signal including SDP+ records and for

reference to the SDP+ records being used to process the broadcast session).

With respect to claim 36, Gagnon et al. discloses determining a broadcast

session description identifier **(See page 15 paragraph 79 of Gagnon et al. for**

reference to determining BARP information with the BARP information indicating

an IP address of a broadcast channel, which is an identifier of the broadcast

session). Gagnon et al. also discloses processing the stream in accordance with a

broadcast session protocol corresponding to the identifier **(See page 16 paragraphs**

83-88 of Gagnon et al. for reference to processing a stream using an SDP+ record

containing a protocol that is indexed by IP address of the broadcast channel).

With respect to claim 40, Gagnon et al. discloses multiplexing a broadcast

session protocol with broadcast content both before and after a protocol change **(See**

page 8 paragraph 36 of Gagnon et al. for reference to multiplexing SDP+ records

periodically, meaning that the records are included both before and after any

protocol change).

With respect to claim 48, Gagnon et al. discloses processing the broadcast

session in accordance with the determined information **(See page 8 paragraph 36 and**

page 16 paragraph 84 of Gagnon et al. for reference to a broadcast signal

including SDP+ records containing broadcast protocol information and for

reference to the SDP+ records being used to process the broadcast session).

With respect to claim 49, Gagnon et al. discloses processing the broadcast

session in accordance with the determined information if the receiving station contains

the protocol **(See page 8 paragraph 36, page 12 paragraph 61, and page 16**

paragraph 84 of Gagnon et al. for reference to a broadcast signal including SDP+

records containing broadcast protocol information and for reference to the SDP+

records being stored in a data store at the receiver station and used to process

the broadcast session).

With respect to claim 50, Gagnon et al. discloses retrieving the broadcast

session protocol from a storage media at the receiving station and processing the

stream in accordance with the retrieved protocol **(See page 12 paragraph 61 of**

Gagnon et al. for reference to SDP+ data store 540 that is a database storing

SDP+ record information for multiple broadcast sessions and for reference to

using data retrieved from the data store to process broadcast sessions).

4.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon

et al. in view of Wugofski and in further view of Birdwell et al. (U.S. Pat. 6032197).

With respect to claim 8, the combination of Gagnon et al. and Wugofski does

not specifically disclose a means for receiving header compression information.

With respect to claim 8, Birdwell et al., in the field of communications, discloses

receiving header compression information **(See column 6 line 59 to column 7 line 52**

of Birdwell et al. for reference to a receiver receiving header compression

information). Using header compression has the advantage of saving bandwidth in the

transmission of data.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Birdwell et al., to combine using header

compression, as suggested by Birdwell et al., with the system and method of Gagnon et

al. and Wugofski, with the motivation being to save bandwidth in the transmission of

data.

5.   Claims 17, 28, and 45 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gagnon et al. in view of Wugofski and in further view of Rustad et al.

(U.S. Pat. 6775303).

With respect to claims 17, 28, and 45, the combination of Gagnon et al. and

Wugofski does not disclose multiplexing a broadcast session protocol with a content of

the broadcast session when the broadcast content bandwidth is low.

With respect to claims 17, 28, and 45, Rustad et al., discloses embedding

control signaling with content data when the bandwidth requirement of the content data

is low **(See column 4 line 66 to column 5 line 7 of Rustad et al. for reference to this**

process). Embedding control signaling with content data when the bandwidth requirement of the content data is low has the advantage of more efficiently using the complete bandwidth of a communication channel.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Gagnon et al., to combine embedding control signaling with content data when the bandwidth requirement of the content data is low, as suggested by Rustad et al., with the system and method of Gagnon et al. and Wugofski, with the motivation being to more efficiently use the complete bandwidth of a communication channel.

6.   Claims 21, 37-38, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. in view of Wugofski and in further view of Matsui et al. (U.S. Pat. 6580756).

With respect to claims 21, 37, and 51, the combination of Gagnon et al. and Wugofski does not disclose requesting SDP information when the SDP information is not available at the receiving station.

With respect to claims 21, 37, and 51, Matsui et al., in the field of communications, discloses requesting SDP information when the SDP information is not available at the receiving station **(See column 13 lines 36-45 of Matsui et al. for reference to a receiver requesting for SDP information to be sent from a server)**. Requesting SDP information when the SDP information is not available at the receiving station has the advantage of allowing a receiver station to actively request SDP

information when the receiver station needs the SDP information to process a data

stream.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Matsui et al., to combine requesting SDP

information when the SDP information is not available at the receiving station, as

suggested by Matsui et al., with the system and method of Gagnon et al. and Wugofski,

with the motivation being to allow a receiver station to actively request SDP information

when the receiver station needs the SDP information to process a data stream.

With respect to claim 38, Gagnon et al. discloses retrieving the broadcast session

protocol from a storage media **(See page 12 paragraph 61 of Gagnon et al. for**

reference to SDP+ data store 540 that is a database storing SDP+ record

information for multiple broadcast sessions including broadcast protocol

information).

Response to Arguments

7.   Applicant's arguments filed 12/9/09 have been fully considered but they are not

persuasive.

Regarding Applicant's argument that the combination of Gagnon et al. and

Wugofski fails to render obvious the claim limitations regarding broadcast overhead

information for the broadcast session being transmitted in-band with the broadcast

session, the Examiner respectfully disagrees. As shown in the rejections above,

Gagnon et al. discloses a system and method of transmitting SDP+ information along

with broadcast programs (See page 8 paragraph 36 of Gagnon et al.). The SDP+

information of Gagnon et al. contains a combination of SDP fields and augmentations

including a protocol version field, the owner/creator and session identifier, the name of

the session, a brief description of the session, the multicast address on which the

session is being broadcast, the start and end times of the broadcast, the repeat times of

the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream,

Webcast, or Intercast), sorting information and filtering information (See page 16

paragraph 84 of Gagnon et al.). Thus, the SDP+ information disclosed by Gagnon et al.

is broadcast overhead information that provides information including physical channel

parameters (i.e. start and end times, repeat times, port, sorting information, filtering

information, etc.) used to process broadcast sessions, as claimed. However, Gagnon et

al. is silent regarding how the SPD+ information is to be transmitted with the broadcast

sessions (i.e. in-band or out-of band). Thus, one of ordinary skill in the art would have

been motivated to look elsewhere to determine exactly how the SDP+ information

should be transmitted with the broadcast session. Wugofski discloses a system and

method whereby overhead information is transmitted in-band with a broadcast session

(See column 2 lines 11-31 and column 3 line 39 to column 4 of Wugofski). Transmitting

overhead data in-band with a broadcast session has the advantage of creating more

efficient use of available bandwidth. Therefore, it would have been obvious for one of

ordinary skill in the art at the time of the invention to combine transmitting overhead

data in-band, as suggested by Wugofski, with the system and method of Gagnon et al.

with the motivation being to use bandwidth more efficiently. Applicant argues that the in-band data of Wugofski is different from the claimed broadcast overhead information because it is not used to process the received broadcast session; however, this argument is moot since it is Gagnon et al. that is used to show this feature in the rejections, not Wugofski. Gagnon et al. discloses the SDP+ information being used to process and receive the broadcast session. Wugofski is used merely to show that the in-band transmission of overhead information with a broadcast session is known within the prior art to provide bandwidth efficiency advantages.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A further example of a prior in-band transmission of broadcast overhead information can be found within the teachings of Auld, Jr. et al. (U.S. Patent 5,257,396). Auld et al. discloses transmitting in-band data with a broadcast television signal that is decoded and used to control the operation of a tuner (See column 1 line 61 to column 3 line 29 and the Figure of Auld et al.).

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON E. MATTIS whose telephone number is

(571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason E Mattis

Primary Examiner
Art Unit 2461

JEM

/Jason E Mattis/
Primary Examiner, Art Unit 2461